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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/444,541	11/22/1999	PAUL R. GAGON	BBE1199CIP	8794

7590 06/28/2004

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EXAMINER	
LEE, PING	

ART UNIT	PAPER NUMBER
2644	12

DATE MAILED: 06/28/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/444,541	GAGON, PAUL R.	
	Examiner	Art Unit	
	Ping Lee	2644	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *07 April 2004*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *11-26* is/are pending in the application.

4a) Of the above claim(s) *19-24* is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *11-18,25 and 26* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *07 April 2004* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

1. The amendment filed 4/7/04 is objected to under 35 U.S.C. 132 because it introduces new matter into the disclosure. 35 U.S.C. 132 states that no amendment shall introduce new matter into the disclosure of the invention. The added material which is not supported by the original disclosure is as follows: the amendment to p. 11, lines 9-18, changed the inverted buffered program signal to "inverted Band-pass boosted program signal".

Applicant is required to cancel the new matter in the reply to this Office Action.

Drawings

2. The drawings were received on 4/7/04. These drawings are approved

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

4. Claims 11-18, 25 and 26 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bohn (US 4,891,841) in view of Gagon (US 5,736,897).

Regarding claims 18, 11-14, Bohn shows the all pass phase inverter (80), a band pass filter having a predetermined Q (45) and a summing amplifier (35). Bohn fails to show the input buffer and fails to explicitly the sound source. Gagon teaches an input

buffer means with state-variable filter for providing buffering, compensation for high, mid and low frequencies separately and automatic balancing of the mod and high frequency signals. This input buffer means could be used for receiving the signal from a tape player and compensating the bandwidth imposed by the dynamic range of the tape. Thus, it would have been obvious to one of ordinary skill in the art to modify Bohn's system by incorporating the input buffer means as taught in Gagon in order to modify and improve the dynamic range of the signal from a tape player.

Regarding claims 15-17, Bohn fails to show the power amplifier and the speaker means. However, Bohn teaches that the equalizer is used for processing the audio signal. It was well known in the art to generate acoustic sound by using a speaker means connected to an equalizer and a power amplifier. Thus, it would have been obvious to one of ordinary skill in the art to generate the sound using well known speaker means and power amplifier connected to the signal generated by Bohn's system in view of Gagon in order to have an equalizer compensating the signal from a narrow dynamic range, such as the one from a tape player.

5. Claims 11-18, 25 and 26 are rejected under 35 U.S.C. 103(a) as being unpatentable over Gagon (US 5,736,897) in view of Bohn (US 4,891,841).

Regarding claims 18, 11-14, Gagon shows the structure of the state-variable filter input buffer means, but fails to show the all pass phase inverter (80), a band pass filter having a predetermined Q (45) and a summing amplifier (35). Bohn teaches an equalizer using such components to provide independent and smooth band equalizing . Thus, it would have been obvious to one of ordinary skill in the art to modify Gagon's

system by using the equalizer as taught in Bohn to further improve the signal response with smooth band equalizing.

Regarding claims 15-17, neither Gagon nor Bohn shows the power amplifier and the speaker means. However, both Gagon and Bohn teach that the device is used for processing the audio signal. It was well known in the art to generate acoustic sound by using a speaker means connected to an equalizer and a power amplifier. Thus, it would have been obvious to one of ordinary skill in the art to generate the sound using well known speaker means and power amplifier connected to the signal generated by Gagon's system in view of Bohn in order to generate an improved sound signal from a source with a narrow dynamic range, such as the one from a tape player.

Response to Arguments

6. Applicant's arguments filed 4/7/04 have been fully considered but they are not persuasive.

Applicant argued that the newly amended claim 18 is a means plus function claim has a scope to include all disclosed embodiment performing the recited function. It appears that applicant intended to imply that reference '841 cannot be used for the rejection because reference '841 is being incorporated into the subject application.

It is noticed that reference '841 has been made to the public more than one year before the earliest filing date of the subject application. Therefore, applicant fails to overcome 103 rejection.

Applicant argued that the limitation that a band-pass filter having a predetermined Q, coupled to receive the buffered program signal and to provide an inverted band-pass boosted program signal.

It is noticed that the rejected is based on Bohn in view of Gagon, or Gagon in view of Bohn, not each reference alone. By modifying Bohn to incorporate Gagon's input buffer at the input to generate signal to the path 15 of Bohn, the band-pass filter (45) coupled (the input of 45 is linked to 15 through 25, 75) to receive the buffered program signal (through path 15) and to provide an inverted band-pass boosted program signal (to R3). Therefore, the prior art rejection under 35 U.S.C. 103 is valid.

Applicant argued that the band-pass filter of the disclosed invention is used in a forward gain path, not like Bohn's filter as the feedback path.

Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

Applicant argued that Bohn fails to show the output of the band-pass filter connected to the input of the summing amplifier.

As shown in Fig. 1, the summing amplifier (35) adds the signal from the inverter (80) and the output from band-pass filter (45) (through 70, 75). Therefore, Bohn does show the claimed limitation.

Conclusion

7. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ping Lee whose telephone number is 703-305-4865. The examiner can normally be reached on Monday and Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Forester W Isen can be reached on 703-305-4386. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Ping Lee
Primary Examiner
Art Unit 2644

pwl